

1 Q. Further to PUB-NLH-161, please provide a status report on the actions taken by
2 Hydro in response to any recommendations made by the external consultant on
3 system readiness for the 2013-2014 winter season. Include in the response the
4 completion date for each action implemented.

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7 A. The facilities winter readiness report prepared by AMEC was a planned asset
8 management activity initiated by Hydro, and concluded that the equipment was in
9 good shape for the upcoming season. The report also identified some potential
10 risks as discussed in Hydro's response to PUB-NLH-161. Five specific
11 recommendations were made and their status is as follows:

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13 **Recommendation 1:** The facilities continue their current program of equipment
14 monitoring and PM Maintenance.

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16 Hydro continues to plan and execute its equipment monitoring and PM
17 maintenance programs as part of its asset management strategy. PM Compliance
18 measures are also in place to enable management of those programs.

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20 **Recommendation 2:** The facilities re-evaluate and maintain key critical spares and
21 ensure that said spares are both in place and being adequately stored to ensure
22 their condition for use when/if required.

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24 Hydro's Long Term Asset Planning Council, which has representatives for all
25 facilities and is continuing to focus on critical spares assessment in order to improve
26 and integrate its critical spares strategy throughout the organization. As part of
27 that continuing work a request for proposals for a 2014 Holyrood critical spares

1 review by external resources will be issued by April 30, 2014 to enable action on the
2 implementation of any critical findings prior to the upcoming winter season.

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4 PUB-NLH-037 and PUB-NLH-038 can be referred to for additional responses on
5 spares.

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7 **Recommendation 3:** Extreme weather responses should be at the ready

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9 Please refer to PUB-NLH-30 and PUB-NLH-68. Hydro has a process as defined in
10 System Operating Instruction A-003 (filed as Appendix 6 to the *Review of Supply*
11 *Disruptions and Rotating Outages*, Focus Area Report – Coordination and
12 Communication with Customers) and holds preparedness meetings prior to
13 forecasted significant weather events. Hydro is also developing a general winter
14 readiness self-assessment survey for operational areas to use to guide continuous
15 improvement. Development will be completed by May 30, 2014 with the 2014 self-
16 assessment surveys completed by September 30, 2014 in preparation for the
17 upcoming winter season.

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19 **Recommendation 4:** Holyrood GS evaluate how it could keep at least one unit
20 running on station load during a major outage to return to service more quickly.

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22 A preliminary investigation has been completed. It revealed that significant
23 modifications to the station's power distribution protection and control system
24 would be required to accommodate changes to the current design. Further review
25 is ongoing to determine next steps and will be completed by June 30, 2014.

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27 **Recommendation 5:** Generating Stations and TRO examine critical system and
28 equipment control/trip logic (and changes in logic) regarding their response to

1 system disruptions re their adequacy (protection, recovery, flexibility) and initiate
2 changes where it is considered necessary and practical.

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4 Hydro continues to review and monitor critical system and equipment control/trip
5 logic and is managing the following activities in relation to this item:

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7 1. Hydro has commissioned reviews of the system as demonstrated in the Henville
8 reports of 2010 and 2011 as provided in Hydro's response to PUB-NLH-163 and
9 discussed in Hydro's response to PUB-NLH-164. Hydro's process is to
10 consolidate recommendations from these sources and any other investigations,
11 then evaluate their relative risk to safety, cost and reliability to prioritize the
12 work into annual campaigns and execute. The prioritized plan of action for all
13 recommendations incorporating recent work will be completed by May 31,
14 2014.
- 15 2. Hydro is addressing known control/trip logic issues as demonstrated in the
16 action item list from the January 11, 2013 event as described in Hydro's
17 response to PUB-NLH-160.
- 18 3. As demonstrated in Hydro's response to PUB-NLH-164, Hydro's protection and
19 control engineering group carefully evaluates recommended changes before
20 implementation to ensure unexpected problems will not be induced resulting in
21 unintended customer interruptions. Generation assets have system protection
22 tests established based on OEM recommendations.
- 23 4. Hydro continues to investigate control/trip logic concerns that arise from
24 generating station and TRO unplanned outage, to identify and ultimately correct
25 any found concerns.